IN THE CLAIMS

*Please amend claims 1, 2, and 10, and cancel claim 3, as follows. Please also amend withdrawn claims 8, 9, 11-15, and 18-22 as follows.*

1. (Currently Amended) A damascene method for use in forming a magnetic head, comprising:

forming a hard mask layer over an insulator layer;

forming a photoresist layer over the hard mask layer;

performing an image patterning process with the photoresist layer ~~to produce a pattern in the photoresist layer~~ for producing a patterned photoresist having a write coil pattern;

etching to remove portions of the hard mask layer in accordance with the ~~pattern~~ patterned photoresist for producing a patterned hard mask having the write coil pattern;

etching to remove portions of the insulator layer in accordance with the ~~pattern~~ patterned hard mask for producing a patterned insulator having the write coil pattern, and to remove the patterned photoresist;

etching to remove ~~remaining portions of~~ the ~~etched~~ patterned hard mask ~~layer~~;

after removing the patterned hard mask, electroplating an electrically conductive material within the ~~etched portion of the~~ patterned insulator ~~layer~~ having the write coil pattern, for producing a plurality of write coil layers of a write coil of the magnetic head; and

performing a planarization process over the ~~resulting structure~~ electrically conductive material.

2. (Currently Amended) The damascene method of claim 1, wherein the planarization process is improved by the act of etching to remove the ~~remaining portions of the etched~~ patterned hard mask ~~layer~~.

3. (Canceled)

4. (Original) The damascene method of claim 1, wherein the electrically conductive material comprises copper (Cu).

5. (Original) The damascene method of claim 1, wherein the hard mask layer comprises $SiO_2$.

6. (Original) The damascene method of claim 1, wherein the hard mask layer comprises $Ta_2O_5$.

7. (Original) The damascene method of claim 1, wherein the planarization process comprises a chemical-mechanical polishing (CMP).

8. (Withdrawn) The damascene method of claim 1, wherein the acts of etching to remove portions of the hard mask layer and the insulator layer ~~in accordance with the pattern~~ comprise plasma etching.

9. (Withdrawn) The damascene method of claim 1, wherein the acts of etching to remove portions of the hard mask layer and the insulator layer ~~in accordance with the pattern~~ comprises a reactive ion etch (RIE).

10. (Currently Amended) The damascene method of claim 1, wherein the act of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a reactive ion etch (RIE).

11. (Withdrawn) The damascene method of claim 1, wherein the act of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a reactive ion etch (RIE) with use of a fluorine gas.

12. (Withdrawn) The damascene method of claim 1, wherein the act of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a low-bias and isotropic reactive ion etch (RIE).

13. (Withdrawn) The damascene method of claim 1, further comprising:

wherein the act of etching to remove portions of the hard mask layer in accordance with the ~~pattern~~ patterned photoresist comprises a reactive ion etch (RIE) with use of a fluorine gas; and

wherein the act of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a reactive ion etch (RIE) with use of a fluorine gas.

14. (Withdrawn) A method of forming a write coil of a magnetic head, comprising:

forming a hard mask layer over an insulator layer, the insulator layer comprising a hard-baked resist;

forming a photoresist layer over the hard mask layer;

performing an image patterning process ~~to produce a write coil pattern in~~ with the photoresist layer for producing a patterned photoresist having a write coil pattern;

etching, with use of the patterned photoresist, to remove portions of the hard mask layer in accordance with the write coil pattern for producing a patterned hard mask having the write coil pattern;

etching, with use of the patterned hard mask, to remove portions of the hard-baked resist in accordance with the write coil pattern for producing a patterned hard-baked resist having the write coil pattern;

~~etching to remove portions of the insulator layer in accordance with the write coil pattern;~~

etching to remove ~~remaining portions of~~ the ~~etched~~ patterned hard mask ~~layer~~;

after removing the patterned hard mask, electroplating an electrically conductive material comprising copper (Cu) within ~~the etched portion of~~ the patterned hard-baked resist for forming a plurality of write coil layers of the write coil; and

performing a chemical-mechanical polishing (CMP) process over the electrically conductive material.

15. (Withdrawn) The method of claim 14, wherein the CMP process is improved by the act of etching to remove the ~~remaining portions of~~ the ~~etched~~ patterned hard mask ~~layer~~.

16. (Withdrawn) The method of claim 14, wherein the hard mask layer comprises $SiO_2$.

17. (Withdrawn) The method of claim 14, wherein the hard mask layer comprises $Ta_2O_5$.

18. (Withdrawn) The method of claim 14, wherein the acts of etching to remove portions of the hard mask layer and the hard-baked resist ~~in accordance with the write coil pattern~~ comprise a reactive ion etch (RIE).

19. (Withdrawn) The method of claim 14, wherein the act of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a reactive ion etch (RIE).

20. (Withdrawn) The method of claim 14, wherein the acts of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a reactive ion etch (RIE) with use of a fluorine gas.

21. (Withdrawn) The method of claim 14, wherein the act of etching to remove ~~remaining portions of~~ the patterned hard mask ~~layer~~ comprises a low-bias and isotropic reactive ion etch (RIE).

22. (Withdrawn) The method of claim 14, further comprising:

wherein the act of etching to remove portions of the hard mask layer ~~in accordance with the write coil pattern~~ comprises a reactive ion etch (RIE) with use of a fluorine gas; and

wherein the act of etching to remove ~~remaining portions of~~ the ~~etched~~ patterned hard mask ~~layer~~ comprises a RIE with use of a fluorine gas.